## THE UNITED STATES PATENT AND TRADEMARK OFFICE

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2568 Confirmation No.

o9 486,168 Application No.

**Drug Discovery Using Multiple** Invention

**Membrane Mimetic Affinities** 

Charles Pidgeon, et al. Applicant.

February 22, 2000 Filed:

Attorney

3220-65938 Docket.

Mary K. Zeman Examiner:

Certificate Under 37 CTR J 8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Assistant Commissioner for Patents. Washington, D.C., 20231

on July 17, 2001

(Signature)

Garla L. Lwyman

(Printed Name)

## RESPONSE TO RESTRICTION REQUIREMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

This is in response to the Official Action mailed June 18, 2001, in which the Examiner reported that the application contains multiple inventions or groups of inventions not linked to form a single inventive concept under PCT Rule 13.1:

Group I: claims 1-22, drawn to methods of screening test compounds using membrane mimetic surfaces and systems therefor;

Group II: claims 23-28, drawn to compositions comprising two or more

making them; and

Group IV. Claims 34-35, drawn to a functionalized surface.

The Exant er refers to the preliminary search and estaination reports and their

assertion that the special technical feature of the inventions listed is the use of test compounds

and membrane mimetic surfaces to predict interactions of other drugs with membrane surfaces.

Respectfully, such is a mischaracterization of the special technical feature of the present

invention. Claim 1 literally specifies a method of screening test compounds for probable

biological properties, not for prediction of "interactions of other drugs with membrane surfaces."

A careful reading of the cited Liu, et al. reference will reveal that the cited Liu et al. reference

does not teach or suggest the invention specified by any of the present claims. The Liu et al.

reference was simply misapplied during PCT preliminary examination, and Applicants

respectfully request the Examiner's independent reading of that reference and careful comparison

of same with the subject matter specified in the present claims.

Applicants elect the subject matter of Group I, claims 1-22, for prosecution in the

present application. Consideration of the elected claims and review of the pertinent art will

reveal that the drug discovery methodology embodied by the method and system claims in the

elected invention is without antecedent in the prior art. The use of multiple membrane mimetic

surfaces to generate arrays of values for control compounds (for example, known drug

substances) and test compounds and using such arrays to predict biological properties of test

compounds as specified in the present claims, is a novel and powerful tool for drug discovery.

The invention is patentable over the art. Examination of the claims leading to their allowance and

passage of the application to issuance is requested.

Respectfully submitted.

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